

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

**IN THE CLAIMS:**

Please amend the claims as follows:

- 1.(Previously presented) A system for monitoring lithography lasers at at least one integrated circuit fabrication plant, said system, comprising:
- A) a plurality of lasers each being configured for use as illumination sources in an integrated circuit lithography process,
  - B) a terminal server associated with each one of said plurality of lasers;
  - C) a central fabrication plant server unit in communication through a local area network with each of said plurality of lasers through the respective terminal server; said central fabrication plant unit being programmed to acquire data from each of said lasers and to store at least portions of the data in raw form and/or summary form;
  - D) a second server unit providing communication through a communication network between said central fabrication plant server unit and computers utilized by persons having access authorization to the information stored by said central fabrication plant server unit.
2. (Previously presented) A system as in Claim 1 wherein said plurality of lasers are narrow band gas discharge lasers.
- 3.(Original) A system as in Claim 1 wherein each terminal server is provided with a unique internet address.
4. (Previously presented) A system as in Claim 1 wherein said second server is located at a facility of a laser manufacturer.

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

5. (Previously presented) A system as in Claim 1 wherein said central fabrication plant server unit is programmed with software is selected from a list created in modular form said software comprising:

- (a) a data acquisition module
- (b) a parser module
- (c) a database module and
- (d) a user interface module.

6. (Previously presented) A system as in Claim 5 wherein said data acquisition module comprises software components selected from a list comprising:

- (a) laser read and write
- (b) command write to lasers
- (c) command write queue
- (d) data read from lasers
- (e) master scheduler
- (f) interface to parser
- (g) database write queue
- (h) system error logs and error daemon

7. (Original) A system as in Claim 1 wherein data acquired from said lasers is presented at a web site created by said central fabrication plant server unit.

8. (Original) A system as in Claim 7 wherein said data acquired from said laser is presented in the form of summary charts.

9. (Original) A system as in Claim 7 wherein said web site comprises web pages.

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

10. (Previously presented ) A system as in Claim 9 wherein said web pages are selected from a list comprising:
- (a) an administration page
  - (b) summary pages regarding particular lasers
  - (c) service log pages
  - (d) error pages

11. (Previously presented) A system as in Claim 8 wherein said charts are selected from a list comprising:
- (a) chamber lifetime charts
  - (b) LNM charts
  - (c) Stabilization module charts
  - (d) Uptime or downtime charts
  - (e) Maintenance related charts

12. (Previously presented) A system as in Claim 1 wherein said communication network comprises the Internet.

13. (Previously presented) A system as in Claim 1 wherein said communication network comprises an intranet system.

14. (Previously presented) A system as in Claim 1 wherein said terminal server comprises an embedded network card.

15. (Previously presented) A system for monitoring lithography lasers at at least one integrated circuit fabrication plant, said system, comprising:

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

- A) a plurality of lasers each being configured for use as illumination sources in an integrated circuit lithography process,
- B) a terminal server associated with each one of said plurality of lasers;
- C) a central fabrication plant server means in communication through a local area network with each of said plurality of lasers through the respective terminal server; said central fabrication plant means server being programmed to acquire data from each of said lasers and to store at least portions of the data in raw form and/or summary form;
- D) a second server means providing communication through a communication network between said central fabrication plant server means and computers utilized by persons having access authorization to the information stored by said central fabrication plant server means.

16. (Previously presented) A system as in Claim 15 wherein said plurality of lasers are narrow band gas discharge lasers.

17.( Previously presented) A system as in Claim 15 wherein each terminal server is provided with a unique internet address.

18. (Previously presented) A system as in Claim 15 wherein said second server means is located at a facility of a laser manufacturer.

19.( Previously presented) A system as in Claim 15 wherein said central fabrication plant server means is programmed with software created in modular form said software selected from a list comprising:

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

- (a) a data acquisition module
- (b) a parser module
- (c) a database module and
- (d) a user interface module.

20. (Previously presented) A system as in Claim 19 wherein said data acquisition module comprises software components selected from a list comprising:

- (a) laser read and write
- (b) command write to lasers
- (c) command write queue
- (d) data read from lasers
- (e) master scheduler
- (f) interface to parser
- (g) database write queue
- (h) system error logs and error daemon

21. (Previously presented) A system as in Claim 15 wherein data acquired from said lasers is presented at a web site created by said central fabrication plant server means.

22. (Previously presented) A system as in Claim 21 wherein said data acquired from said lasers is presented in the form of summary charts.

23. (Previously presented) A system as in Claim 21 wherein said web site comprises web pages.

24. (Previously presented) A system as in Claim 23 wherein said web pages are selected from a list comprise:

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

- (a) an administration page
- (b) summary pages regarding particular lasers
- (c) service log pages
- (d) error pages

25. (Previously presented) A system as in Claim 22 wherein said charts are selected from a list comprise:

- (a) chamber lifetime charts
- (b) LNM charts
- (c) Stabilization module charts
- (d) Uptime or downtime charts
- (e) Maintenance related charts

26. (Previously presented) A system as in Claim 15 wherein said communication network comprises the Internet.

27. (Previously presented) A system as in Claim 1 wherein said communication network comprises an Intranet system.

28. (Previously presented) A system as in Claim 1 wherein said terminal server comprises an embedded network card.

29. (Previously presented) A method for monitoring lithography lasers at at least one integrated circuit fabrication plant, said method, comprising the steps of:

- A) using a plurality of lasers as illumination sources in an integrated circuit lithography process,

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

B) providing a terminal server associated with each one of said plurality of lasers;

C) utilizing a central fabrication plant server unit in communication through a local area network with each of said plurality of lasers through the respective terminal server; to acquire data from each of said lasers and to store at least portions of the data in raw form and/or summary form;

D) utilizing a second server unit to provide communication through a communication network between said central fabrication plant server unit and computers utilized by persons having access authorization to the information stored by said central fabrication plant server unit.

30. (Previously presented) A method as in Claim 29 wherein said plurality of lasers are narrow band gas discharge lasers.

31. (Previously presented) A method as in Claim 29 wherein each terminal server is provided with a unique internet address.

32. (Previously presented) A method as in Claim 29 wherein said second server is located at a facility of a laser manufacturer.

33. (Previously presented) A method as in Claim 29 wherein said central fabrication plant server unit is programmed with software created in modular form said software is selected from a list comprising:

- (e) a data acquisition module
- (f) a parser module
- (g) a database module and
- (h) a user interface module.

Atty. Docket No. 2000-0085-14  
USSH 10/767,316

34. (Previously presented) A method as in Claim 33 wherein said data acquisition module comprises software components are selected from a list comprising:

- (a) laser read and write
- (b) command write to lasers
- (c) command write queue
- (d) data read from lasers
- (e) master scheduler
- (f) interface to parser
- (g) database write queue
- (h) system error logs and error daemon

35. (Previously presented) A method as in Claim 29 further comprising presenting the data acquired from said lasers at a web site created by said central fabrication plant server unit.

36. (Previously presented) A method as in Claim 35 further comprising presenting data acquired from said laser in the form of summary charts.

37. (Previously presented) A method as in Claim 35 wherein said web site comprises web pages.

38. (Previously presented) A method as in Claim 37 wherein said web pages are selected from a list comprising:

- (a) an administration page
- (b) summary pages regarding particular lasers
- (c) service log pages



Atty. Docket No. 2000-0085-14  
USSN 10/767,316

(d) error pages

39. (Previously presented ) A method as in Claim 36 wherein said charts are selected from a list comprising:

- (a) chamber lifetime charts
- (b) LNM charts
- (c) Stabilization module charts
- (d) Uptime or downtime charts
- (e) Maintenance related charts

40. (Previously presented) A method as in Claim 29 wherein said communication network comprises the Internet

41. (Previously presented) A method as in Claim 29 wherein said communication network comprises an intranet system.

42. (Previously presented) A system as in Claim 29 wherein said terminal server comprises an embedded network card.

43. (Previously presented) The apparatus of Claim 1 further comprising the central fabrication plant server means and the plurality of terminal servers are contained inside of at least one network at firewall maintained by the operator of the integrated circuit lithography process; and, the second server is contained inside of at least one network firewall maintained by a manufacturer of the lasers.

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

44. (Previously presented) The apparatus of Claim 15 further comprising the central fabrication plant server means and the plurality of terminal servers are contained inside of at least one network at firewall maintained by the operator of the integrated circuit lithography process; and, the second server is contained inside of at least one network firewall maintained by a manufacturer of the lasers.

45. (Previously presented) The method of Claim 29 and further comprising the central fabrication plant server means and the plurality of terminal servers are contained inside of at least one network at firewall maintained by the operator of the integrated circuit lithography process; and, the second server is contained inside of at least one network firewall maintained by a manufacturer of the lasers.

46. (Previously presented) The apparatus of Claim 1 further comprising the central fabrication plant server unit is programmed with a data acquisition module.

47. (Previously presented) The apparatus of Claim 46 further comprising the data acquisition module comprises components selected from the list including:

- a) laser read and write;
- b) command write to lasers;
- c) command write queue;
- d) data read from lasers;
- e) master scheduler;
- f) interface to parser;
- g) database write queue;
- h) system error log; and
- i) error daemon.

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

48. (Previously presented) The apparatus of Claim 15 further comprising the central fabrication plant server means is programmed with a data acquisition module.

49. (Previously presented) The apparatus of Claim 48 further comprising the data acquisition module comprises components selected from the list including:

- a) laser read and write;
- b) command write to lasers;
- c) command write queue;
- d) data read from lasers;
- e) master scheduler;
- f) interface to parser;
- g) database write queue;
- h) system error log; and
- i) error daemon.

50. (Previously presented) The method of Claim 29 further comprising the central fabrication plant server unit is programmed with a data acquisition module.

51. (Previously presented) The method of Claim 50 further comprising the data acquisition module comprises components selected from the list including:

- a) laser read and write;
- b) command write to lasers;
- c) command write queue;
- d) data read from lasers;
- e) master scheduler;
- f) interface to parser;
- g) database write queue;

Atty. Docket No. 2000-0085-14  
USSN 10/767,316

- h) system error log; and
- i) error daemon.